REMARKS

Prior to the present amendment, claims 21-54, 56-68, 70-73 and 76-110 were pending. Of these claims, claims 22-54, 61-68, 70-73 and 76-103 were withdrawn from consideration as a result of a restriction requirement. By this amendment, applicants have cancelled the withdrawn claims, claims 22-54, 61-68, 70-73 and 76-103. Accordingly, claims 21, 56-60 and 104-110 are currently pending.

In the Office Action, claims 21, 56-60 and 104-110 were rejected under 35 U.S.C. §112, first paragraph allegedly for lack of enablement. The examiner contends that the claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. To support the examiner's assertion, the examiner cites Benkirane et al. (*J. Biol. Chem.* 1996, 271:33218-33224).

According to the examiner, Benkirane et al. teaches that immune recognition of a peptide varies with the placement of a methyleneamino bond. Therefore, the examiner alleges that it would require undue experimentation for one of skill to predict which amino acid peptide bond in the recited peptides could be replaced, while maintaining the effectiveness of the altered peptide.

The examiner acknowledges that the effectiveness of the altered peptide also encompasses peptide analogues which can be antagonists. Applicants wish to point out to the examiner that the specification also includes peptide analogues which can be partial agonists.

Applicants respectfully disagree with the rejection. It is well known in the art that peptides that bind to MHC are relatively short. For example, such peptides can be approximately nine amino acids in length. A peptide that is nine amino acids in length, for instance, has a total of only 255 possible peptide analogues containing at least one peptide bond replacement.

Thus, the number of possible peptide analogues for a parent peptide is a relatively small number. Assays for screening the small number of peptide analogues are routine to those of ordinary skill in the art.

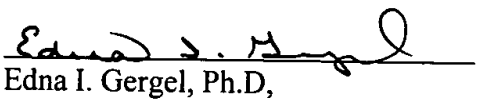
In fact, the specification discloses assays for screening peptide analogues that recognize and associate with MHC. See *inter alia*, page 17, line 20 and continuing to page 18, line 12 of the specificiaton as originally filed. Furthermore, the specification on page 18, lines 13-19 discloses a range of association constants at which peptide analogues useful in the present invention can associate with MHC molecules.

Moreover, the specification, *inter alia*, on page 18, lines 23 to page 19, line 23 discloses criteria for determining whether a peptide analogue is an agonist, partial agonist, or an antagonist of the T cell receptor. For example, according to the specification, a peptide analogue which induces *in vitro* the appearance and growth of cytotoxic T lymphocytes, cytolysis, secretion of cytokines is an agonist. Suitable assays can be found *inter alia,* on pages 41-42 of the specification as originally filed.

In conclusion, screening a relatively small number of peptide analogues for their ability to associate with MHC and determining whether the analogues are agonists, partial agonists, or antagonist does not constitute undue experimentation. The enabling nature of the specification is especially apparent in view of the criteria for defining agonists, partial agonists and antagonists. It is especially significant that suitable assays are provided for determining agonists, partial agonists and antagonists.

Allowance of pending claims 21, 56-60 and 104-110 is earnestly requested. If the examiner has any questions regarding this amendment, the examiner is respectfully requested to contact the undersigned at the telephone number set forth below.

Respectfully requested,



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